

WO 2005/040193

SEQUENCE LISTING

<110> Winter Sederoff, Heike
Huber, Steven C
Larabell, Carolyn A

<120> SYNTHETIC PEPTIDES THAT CAUSE F-ACTIN BUNDLING AND BLOCK ACTIN
DEPOLYMERIZATION

<130> JIB-1571PCT

<140> Not yet assigned

<141> 2004-10-20

<150> US 60/513,275

<151> 2003-10-20

<160> 24

<170> PatentIn version 3.2

<210> 1

<211> 15

<212> PRT

<213> Zea mays

<220>

<221> peptide

<222> (1)..(15)

<400> 1

Glu	Asn	Gly	Ile	Val	Arg	Lys	Trp	Ile	Ser	Arg	Phe	Glu	Val	Trp
1				5				10						15

<210> 2

<211> 15

<212> PRT

<213> Zea mays

<220>

<221> peptide

<222> (1)..(15)

<400> 2

Glu	Asn	Gly	Ile	Leu	Arg	Lys	Trp	Ile	Ser	Arg	Phe	Asp	Val	Trp
1				5				10						15

<210> 3

<211> 15

<212> PRT

<213> Zea mays

<220>

<221> peptide

<222> (1)..(15)

<400> 3

Glu Asn Gly Ile Val Arg Lys Trp Ile Ser Arg Phe Glu Val Trp
1 5 10 15

<210> 4
<211> 15
<212> PRT
<213> Zea mays

<220>
<221> peptide
<222> (1)..(15)

<400> 4

Glu Asn Gly Ile Leu Lys Lys Trp Ile Ser Arg Phe Asp Val Trp
1 5 10 15

<210> 5
<211> 15
<212> PRT
<213> Drosophila melanogaster, Homo sapiens

<220>
<221> peptide
<222> (1)..(15)

<400> 5

Glu His Gly Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile Trp
1 5 10 15

<210> 6
<211> 15
<212> PRT
<213> Drosophila melanogaster, Homo sapiens

<220>
<221> peptide
<222> (1)..(15)

<400> 6

Glu His Gly Ile Ile Thr Asn Trp Asp Asp Met Glu Lys Ile Trp
1 5 10 15

<210> 7
<211> 15
<212> PRT
<213> Drosophila melanogaster

<220>
<221> peptide
<222> (1)..(15)

<400> 7

Glu His Gly Ile Val Lys Asp Trp Asn Asp Met Glu Arg Ile Trp

<210> 11
 <211> 15
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SS11 inactive synthetic peptide

<220>
 <221> peptide
 <222> (1)..(15)

<400> 11

Ile Leu Arg Val Pro Phe Arg Thr Glu Asn Gly Ile Val Arg Lys
 1 5 10 15

<210> 12
 <211> 16
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SS12 active synthetic peptide

<220>
 <221> peptide
 <222> (1)..(16)

<400> 12

Gly Ile Val Arg Lys Trp Ile Ser Arg Phe Glu Val Trp Pro Tyr Leu
 1 5 10 15

<210> 13
 <211> 16
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SS15 less active synthetic peptide

<220>
 <221> peptide
 <222> (1)..(16)

<220>
 <221> SITE
 <222> (6)..(6)
 <223> replaced Tryptophan residue with Alanines

<220>
 <221> SITE
 <222> (13)..(13)
 <223> replaced Tryptophan residue with Alanine

<400> 13

Gly Ile Val Arg Lys Ala Ile Ser Arg Phe Glu Val Ala Pro Tyr Leu
 1 5 10 15

<210> 14
 <211> 9
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SS16 less active synthetic peptide corresponding to short middle portion of SS12

<220>
 <221> peptide
 <222> (1)..(9)

<400> 14

Ser Arg Phe Glu Val Trp Pro Tyr Leu
 1 5

<210> 15
 <211> 19
 <212> PRT
 <213> Artificial sequence

<220>
 <223> NR11 inactive synthetic peptide

<220>
 <221> peptide
 <222> (1)..(19)

<400> 15

Gly Pro Thr Leu Lys Arg Thr Ala Ser Thr Ala Phe Met Asn Thr Thr
 1 5 10 15

Ser Lys Lys

<210> 16
 <211> 14
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SP26 inactive synthetic peptide

<220>
 <221> peptide
 <222> (1)..(14)

<400> 16

Gly Arg Met Arg Arg Ile Ala Thr Val Glu Met Met Lys Lys
 1 5 10

<210> 17

<211> 8
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Small block of SS12 sequence required for less active
 synthetic peptide

<220>
 <221> PEPTIDE
 <222> (1)..(8)

<400> 17

Trp Ile Ser Arg Phe Glu Val Trp
 1 5

<210> 18
 <211> 10
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SP3 inactive synthetic peptide

<220>
 <221> PEPTIDE
 <222> (1)..(10)

<400> 18

Arg Arg Ile Ser Ser Val Glu Asp Lys Lys
 1 5 10

<210> 19
 <211> 20
 <212> PRT
 <213> Drosophila melanogaster

<220>
 <221> PEPTIDE
 <222> (1)..(20)

<400> 19

Glu His Gly Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile Trp His
 1 5 10 15

His Thr Phe Tyr
 20

<210> 20
 <211> 15
 <212> PRT
 <213> Homo sapiens

<220>

<221> PEPTIDE
 <222> (1)..(15)

<400> 20

Glu His Gly Val Val Arg Asp Trp Asn Asp Met Glu Arg Ile Trp
 1 5 10 15

<210> 21
 <211> 15
 <212> PRT
 <213> Homo sapiens

<220>
 <221> PEPTIDE
 <222> (1)..(15)

<400> 21

Glu Asn Gly Ile Val Arg Asn Trp Asp Asp Met Lys His Leu Trp
 1 5 10 15

<210> 22
 <211> 6
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Core minimum block of SS12 sequence required for less active
 synthetic peptide

<220>
 <221> PEPTIDE
 <222> (1)..(6)

<400> 22

Ser Arg Phe Glu Val Trp
 1 5

<210> 23
 <211> 13
 <212> PRT
 <213> Artificial sequence

<220>
 <223> SS synthetic peptide B

<220>
 <221> PEPTIDE
 <222> (1)..(13)

<400> 23

Trp Ile Ser Arg Phe Glu Val Trp Pro Tyr Leu Lys Lys
 1 5 10

<210> 24
 <211> 20

<212> PRT
<213> Artificial sequence

<220>
<223> SS synthetic peptide C

<220>
<221> PEPTIDE
<222> (1)..(20)

<400> 24

Glu	Asn	Gly	Ile	Val	Arg	Lys	Trp	Ile	Ser	Arg	Phe	Glu	Val	Trp	Pro
1				5				10						15	

Tyr	Leu	Lys	Lys
			20